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ABSTRACT

This paper presents the background of Energy Abstracts for Policy Analysis with regard to scope, cost, brief history, coverage, and online availability. The computer-produced format and the indexes are discussed. An analysis of the tool's syndetic structure and the characteristics and quality of the abstracts is included, as well as a brief comparative analysis of Energy Abstracts for Policy Analysis, ERDA Energy Research Abstracts, Engineering Index Energy Abstracts, and Energy Information Abstracts with regard to scope and coverage, cost, number of abstracts, and emphasis. Small-sample quantitative analyses on corporate author entries, growth in number of abstracts, time lag for periodical articles, and country of origin of abstracted journals comprise the final section. Recommendations for improvement of the tool are cited. (Author/KP)

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ENERGY ABSTRACTS FOR POLICY ANALYSIS --A CRITICAL ANALYSIS

Indexing/Abstracting
Term Paper

for
E. B. Jackson
by
Suzy K. Giannoble
November 28, 1977

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ENERGY ABSTRACTS FOR POLICY ANALYSIS
--A CRITICAL ANALYSIS

PREFACE

The purpose of this critique is to analyze a relatively new abstracting service, Energy Abstracts for Policy Analysis, as to the quality of the service: its scope and coverage, its efficiency, the quality of its abstracts, and the ease of use. At the conclusion, recommendations for improvement will be made.

All information contained within this report was obtained from personal analysis of the tool itself or from a telephone interview with Lee Thompson, Editor at Oak Ridge, Tennessee, who was gracious with his time and information.

ENERGY ABSTRACTS FOR POLICY ANALYSIS
--A CRITICAL ANALYSIS

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ENERGY ABSTRACTS FOR POLICY ANALYSIS
--A CRITICAL ANALYSIS

Introduction

Energy Abstracts for Policy Analysis began publication in November, 1974, as a follower of the NSF-Rann Energy Abstracts. It is published by ERDA Technical Information Center, prepared by the National Science Foundation, and edited by Miriam P. Guthrie and Lee M. Thompson at Oak Ridge National Lab, Oak Ridge, Tennessee.

The service costs $20 per year for 12 monthly issues and an Annual Index. The stated purpose is to cover "nontechnological or quasi-technological" articles or reports of significance in the enrgy field. It does not generally attempt to cover news items, as it feels these are adequately covered in other sources.

EAPA coverage includes all phases of energy analysis and development, including:

1. research and development programs,
2. conservation and efficiency,
3. economics, sociology and politics,
4. supply and demand,
5. systems studies,
6. policy, regulation and legislation, and
7. environmental effects, including health and safety.

The specific fields included within the scope are: conventional (fossil and nuclear) energy,

nonconventional (solar, geothermal, wind, tidal, biomass, waste processing) energy, hydrogen and synthetic fuels, energy conversion, storage and transport, and energy consumption and utilization.

The types of literature covered are Congressional committee prints; the FEDERAL REGISTER; ERDA, FEA and other departmental reports; regional, state and local government reports; periodicals, including trade journals, newsweeklies; conference proceedings, papers; books; and documents from industrial firms, private institutes, educational institutions and societies.

Background

In my interview with Lee Thompson, he gave me much valuable information. Some of it is summarized here, other interspersed through this report.

The materials for abstracting are obtained in several manners. Some are sent directly to EAPA, others are "birddogged." The editors maintain an "aggressive acquisition" program in order to locate sources of additional information. Only in this manner do they feel they can "fill the gap" in energy abstracting services--by obtaining more elusive articles and documents.

The editors' goals include coverage of 90% of the available related energy material and 100% of the available government documents in the field. All articles/reports are chosen for content, regardless of the source.

EAPA information is available online through ERDA Energy Database, along with ERDA Energy Research Abstracts.

Format

EAPA is computer produced. Unlike some similar tools, the indentions, size of type, use of capital letters, and amount of white space makes EAPA usually quite readable. There are a few problems associated with this type of tool which do occur occasionally within this one: an occasional lack of editing which leads to two different headings for similar material within the subject index; a heading which appears at the bottom of the page alone, making quick scanning for information inconvenient and sometimes misleading.

The primary parts of each issue are:

1. Table of Contents: extensive enough to allow for browsing. [Sample in Appendix, further discussion in section on syndetic structure.]

2. Personal Author Index: author's name given in form on document, but first name reduced to initials. Multiple authors receive multiple entries.

3. Subject index: descriptors paired with qualifiers. Subjects from controlled thesaurus.

4. Corporate author index: basically from report literature and other types of format when author affiliation is desirable, as in symposium proceedings/papers. Also gives report number and title.

5. Report No. index: includes reports, patents, and conference papers. Abstract numbers and availability given--the who and how much.

The introductory notes are excellent for enabling proper use of this tool. There is the added feature that each index contains a more detailed explanatory section at the beginning, further aiding its efficiency. The introductory notes contain some information on scope and coverage; however, as a librarian, I would have appreciated more information on the background of the tool, including how it's available online and how abstracts are prepared.

Syndetic Structure

Following is found a more detailed explanation of the various parts of EAPA and how they aid the efficient use of the tool.

1. Table of Contents: this appears in outline form which is good for browsing. However, it lists headings which contain no citations [only references to other headings] which can be misleading.

2. Indices: The indices are generally very complete, but they are not always completed edited.

Subject Index: Under shale oil and oil shale are found similar entries in some monthly issues.

Also, general subject inclusion is obtained from the title, then concept. It seems that the subject listing is very complete: eg. there are 37 modifications under "oil shale" in the 1976 Annual Index for the 60 abstracts included.

Further, there are "see" references to synonymous terms.

Corporate Index: This index has a nice time-saving feature--it includes names of the articles, not just abstract numbers, to aid in "sorting" of pertinent articles.

Author Index and Report No. Index: both give source for purchasing reports/documents.

The cross-references within the body of EAPA usually "refer also" from one heading to specific citations. There are never references from one heading to another heading or from one citation to another citation. It seems to me that there would be times when this would be desirable.

Abstract Characteristics/Quality

The abstracts are prepared in-house, utilizing author abstracts, tapes from NTIS and subject specialists. Generally, they are indicative; however, sometimes they appear to be informative and often they are a cross between the two types.

The length of the abstracts varies greatly: from four to 35 lines, from 30 to 250 words. They are almost always initialed and are consistently good. Sometimes, it is felt, they are too long to serve the purposes of

abstracting. Each abstract does include the author's affiliation where applicable, the price of and source of the report/document, and all document numbers. Often not included are the existence of references or bibliography.

Comparison

There are four main abstracting services in the field of energy at this time: ERDA ENERGY RESEARCH ABSTRACTS, ENGINEERING INDEX ENERGY ABSTRACTS, ENERGY INFORMATION ABSTRACTS, AND EAPA. A brief summary of each follows.

1. ERDA Energy Research Abstracts: This is the "companion" to EAPA, the other half of the National Science Foundation's contribution to energy abstracting. It contains the "hard stuff." The two services are online together.

ERDA-ERA:
- covers all types and sources.
- More extensive than EAPA, research-oriented.
- 27,000 abstracts pub. in 1976
- Cost: $184/year which includes 24 semi-monthly, semiannual and annual index.

EI ENERGY ABSTRACTS:
- reprint from EI + 25% new information.
- Emphasis on application, on technical level. All source types.
- 16,000 abstracts pub. in 1976
- Cost: $250/year, includes 12 monthly issues and an annual index.

ENERGY INFORMATION ABSTRACTS:
- published by Environment Information Center, New York.
- Covers periodicals, documents. Emphasis on environmental aspects.
- 4,500 abstracts pub. in 1976
- Cost: $185/year, includes 12 monthly issues.

and
EAPA:
covers all formats, heavy on government documents and reports.
2,500 abstracts in 1976. Cost: $20/year year for 12 monthly issues and annual index.

From the previous information, it can be seen that, though there are several sources of information on energy, none of the stated scopes and coverages overlaps. There was found to be some overlap between EI ENERGY ABSTRACTS and EAPA in the core journals, and it would be expected that this would occur also with ENERGY INFORMATION ABSTRACTS; however, at this time it does not seem that the overlap in coverage is serious, since all include a rather high percentage of "unique" entries.

Quantitative Analysis

Several limited quantitative analyses were conducted in order to learn the composition of corporate authors included; to ascertain the approximate rate of growth for this new service; to determine approximate time lag for journal articles/reports; and to learn the proportion of various types of journals represented by the abstracts.

Table I illustrates the number of entries from the corporate indexes of January, 1977 and May, 1977. Though the number has increased in every case, the relative proportion of representation from each segment is approximately the same. [January, 1977 total was 46; May, 1977 total, 72.]

Table II shows that the average number of abstracts in January-June, 1977 (total 2,051) was 341/month, while between January-December, 1976 (total 2,513) the average was 209/month, an increase of 62%. This illustrates that EAPA is expanding its coverage rapidly.

Table III illustrates the need for the time lag between time of publication and appearance in EAPA to be reduced. The mean time lag is about nine months, with a cluster between 7-8 months and another between 10-11 months. [For this study, "Oil Shale and Tar Sands" category was used for 1976-1977, a relatively small sample.]

Table IV indicates what proportion of the journals abstracted were from the U.S. and Canada and what proportion other countries. The emphases of EAPA is clearly on English language journals: 63% U.S. and Canada, 14% Great Britain, 8% "other" European journals.

TABLE I

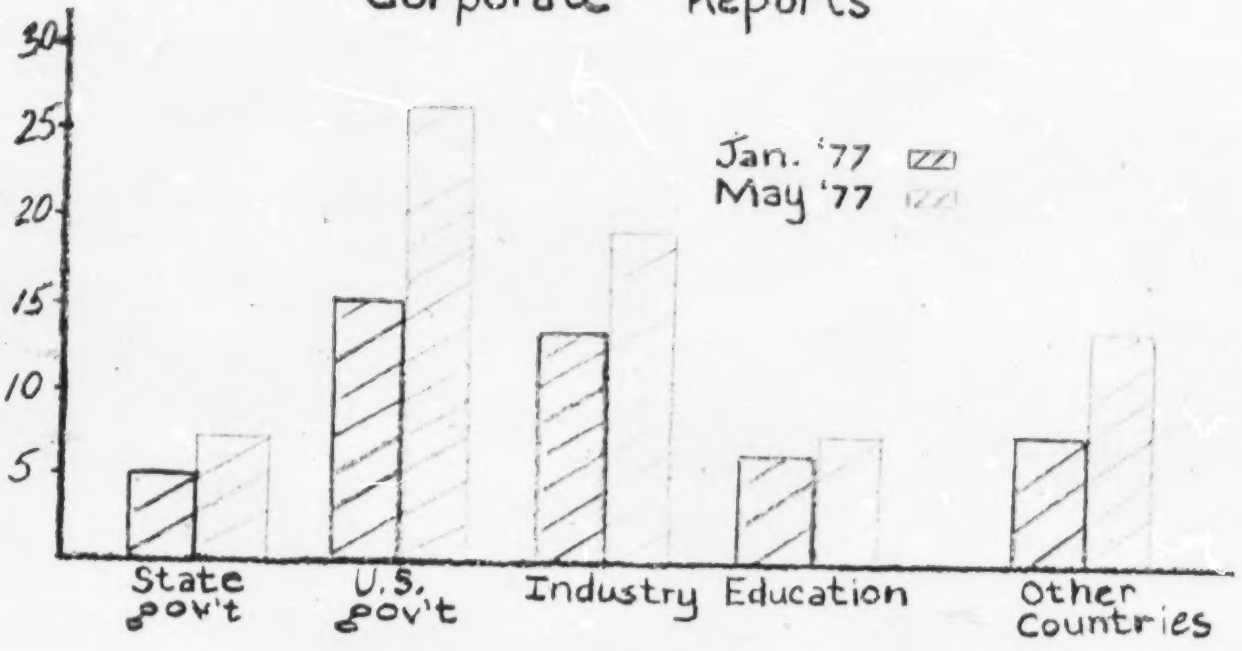
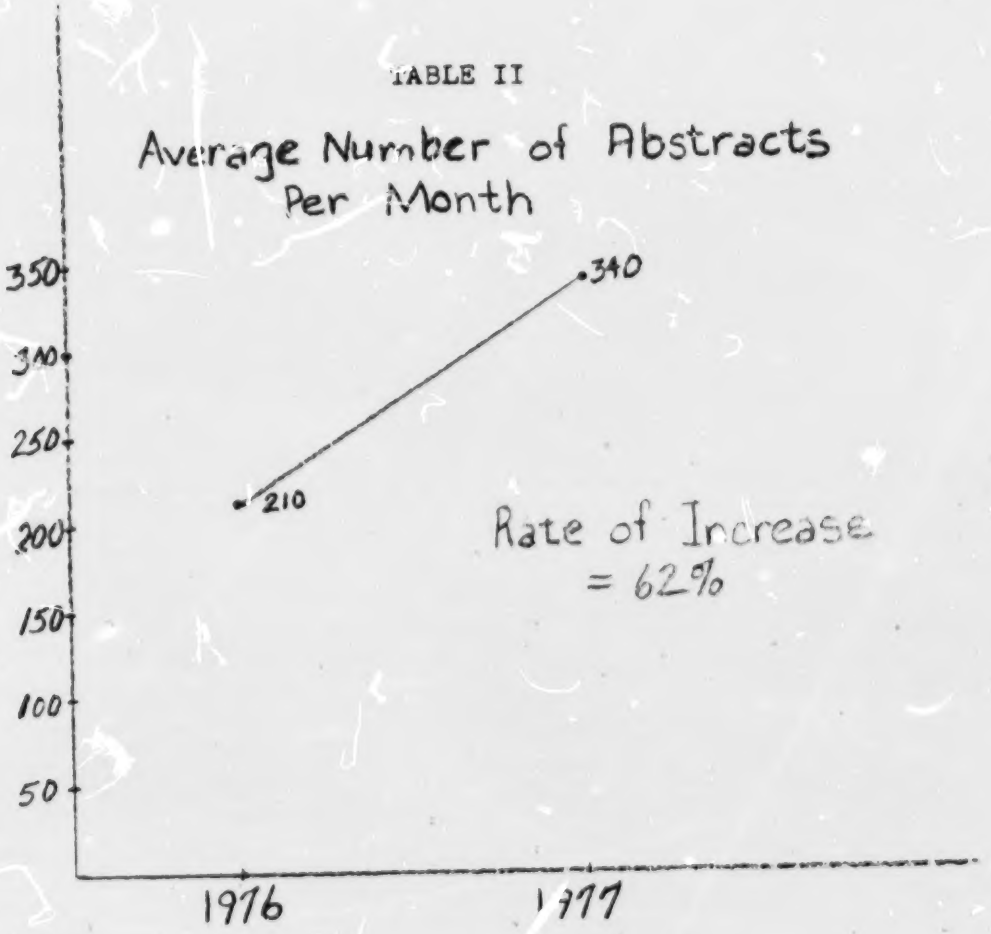

Corporate Reports
30
25
20
15
10
5
Jan. '77
May '77
State Gov't
U.S. Gov't
Industry
Education
Other Countries

TABLE II

Average Number of Abstracts Per Month



Rate of Increase = 62%

TABLE III

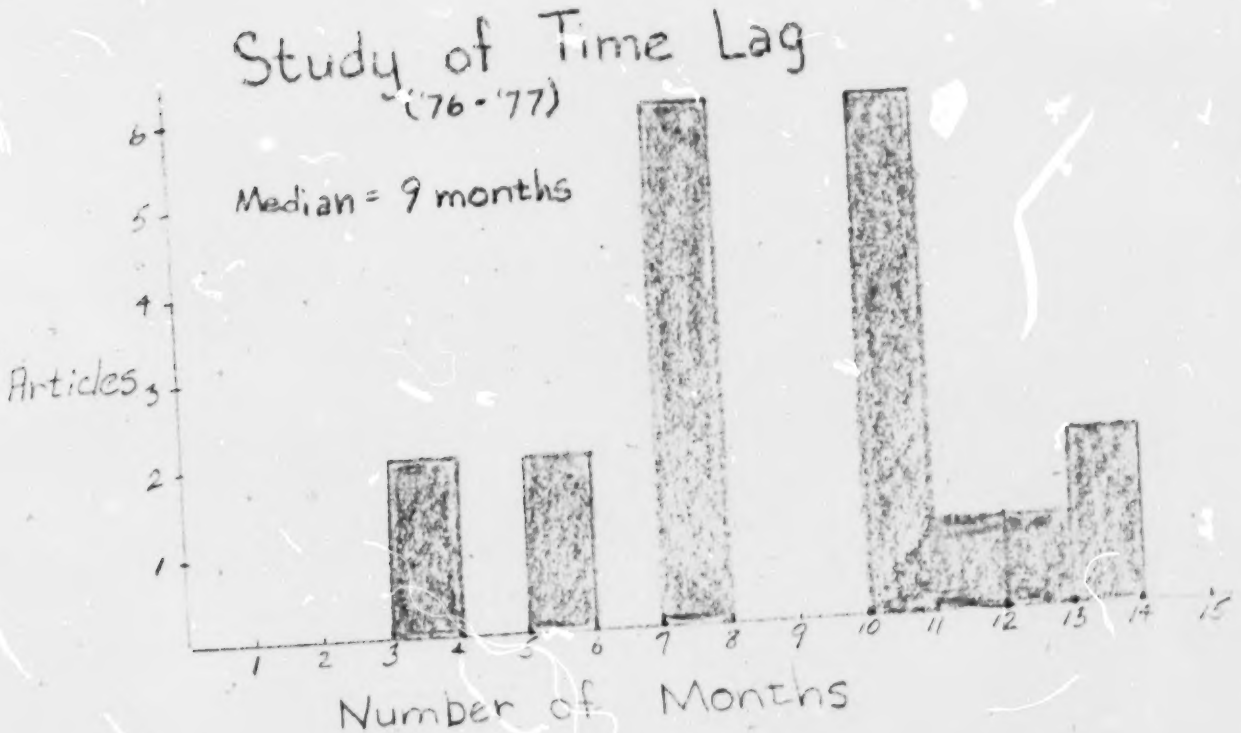
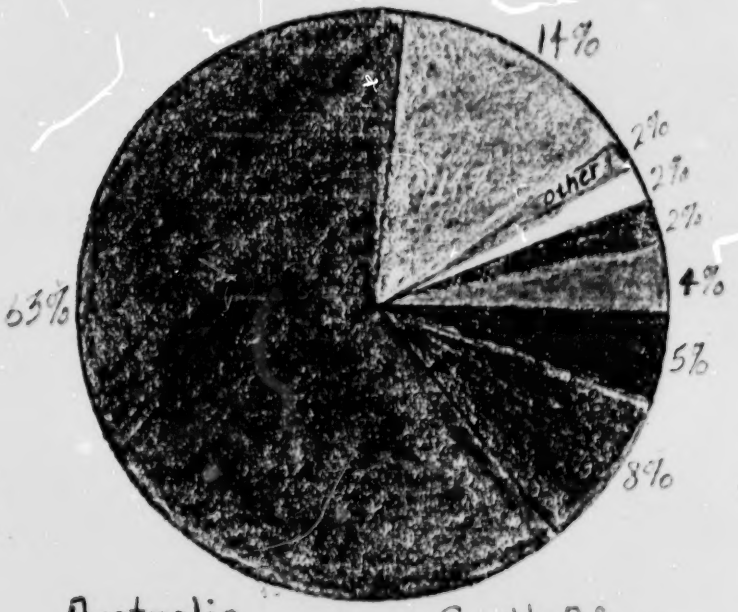

Study of Time Lag
(76-77)
Median = 9 months
Articles
6
5
4
3
2
1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Number of Months

TABLE IV

1976

Journals Abstracted



Australia

U.S. & Canada

Great Britain

South Africa

West Germany

Other Europe

Conclusions and Recommendations

The writer found the Energy Abstracts for Policy Analysis a most useful tool. It is much better designed than many similar tools and is therefore easier to use.

It is valid that EAPA exists. There is not a substantial amount of overlap in coverage between EAPA and the energy abstracting services; and it is a much more convenient way to access this type of material than going through ERDA-Energy Research Abstracts and this combined. It would be recommended, in light of its reasonable cost and additional information, for any technology library with related information.

The recommendations offered to EAPA are the following:

1. That the time lag between publication date and inclusion date be reduced to a maximum of six months.

2. That editing quality be increased to eliminate dual headings in the subject index and headings from the bottom of a column.

3. That some of the abstracts be shortened to not more than 150-175 words rather than almost 250 words.

4. That a semiannual index be included in future plans to facilitate bibliographic searching between July and December of each year.

* * * * * *

APPENDIX

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